

National Aeronautics and Space Administration

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(NASA-TM-101787) [PROCUREMENT ACTIONS BY NASA HEADQUARTERS AND FIELD PROCUREMENT OFFICES] Annual Report, FY 1985 (NASA)

N89-71131

Unclas 00/83 0217260

INTRODUCTION

This report presents summary data on all procurement actions and detailed information on all contracts, grants, agreements and other procurements of \$25,000 and over awarded by NASA Headquarters and field procurement offices during Fiscal Year 1985.

The aggregate dollar value of the actions on which detailed data are obtained constituted 97 percent of the total dollar value of all procurements accomplished during Fiscal Year 1985. However, in terms of numbers of actions, these larger procurements accounted for only 21 percent of the total actions.

The term "procurement action" as used in this report means contractual actions to obtain supplies, services or construction which obligate or deobligate funds. A procurement action thus may be a new procurement or a debit or credit change to an existing procurement such as an amendment, supplemental agreement, change order, cancellation or termination that changes the total amount of funds obligated. The term "net value of awards" or "net value" refers to the net amount of obligations resulting from debit and credit procurement actions.

The report was prepared by the Procurement Management Division, Office of Procurement, NASA Headquarters. Inquiries and suggestions with reference to the report should be addressed to:

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SUMMARY

NASA's procurements during Fiscal Year 1985 totalled \$8,298.0 million. This is 12.8 percent more than was awarded during Fiscal Year 1984 (for further detail see Page 6).

Approximately 80 percent of the net dollar value was placed directly with business firms, 9 percent with the California Institute of Technology for operations conducted by or through the Government-owned Jet Propulsion Laboratory, 4 percent with educational and other nonprofit institutions and 6 percent with or through other Government agencies (Page 7).

Seventy-seven percent of the total direct awards to business, excluding awards to disadvantaged firms under Section 8(a) of the Small Business Act, represented competitive procurements, either through sealed bidding or competitive negotiation. Twenty-three percent constituted other than competitive procurements. With respect to the competitive procurements, 8 percent of the total awards represented new contracts and 69 percent constituted within scope modifications (incremental funding actions and change orders) to contracts awarded competitively in prior years. Of the other than competitive procurements, 4 percent of the total awards represented new contracts and 19 percent constituted other than competitive modifications to contracts awarded With further respect to these other than competiprior years. tive procurements, 3 percent of the total awards represented follow-on after competition awards to companies that had been previously selected on a competitive basis to perform the original research and development on applicable projects. In these instances, selection of another source would have required an extensive period of preparation for manufacturing and additional cost to the Government by reason of duplication of investment and The remaining 20 percent included awards arising preparation. from acceptable unsolicited proposals offering new ideas and concepts; awards to contractors having unique capabilities to meet particular requirements of the Government; and awards for sole source items (Page 9).

On April 1, 1985, the Competition in Contracting Act of 1984 (CICA) went into effect and substantially changed the basic statutes underlying the Federal procurement system. This new Act requires Federal agencies to provide for full and open competition by soliciting sealed bids or requesting competitive proposals, or use other competitive procedures, unless a statutory exception permits other than full and open competition. This report includes procurements awarded prior to the effective date of CICA as well as those that were awarded during the fiscal year utilizing CICA requirements. For the purpose of categorizing procurements with respect to competition, procurements that are awarded using full and open competition will be identified as

competitive whereas other than full and open competition procurements will be identified as other than competitive.

With respect to contract pricing provisions, awards on contracts having cost-plus-award-fee provisions amounted to 56 percent of the total awards of \$25,000 and over to business firms. Incentive contracts, both cost plus incentive fee and fixed price incentive, accounted for 16 percent of total awards. Awards on cost-plus-fixed-fee contracts constituted 9 percent of the total. Firm-fixed-price contracts accounted for 13 percent of the total (Page 14).

Small business firms received \$644.7 million or 10 percent of NASA's direct awards to business firms. This percentage reflects the fact that most of the awards to business firms were for large continuing research and development contracts for major systems and major items of hardware. Of the total new contract awards of \$803.5 million to business firms during the year, small business firms received \$249.1 million or 31.0 percent (Page 16). Included in the small business total were NASA awards of \$29.5 million to small and small disadvantaged business through the Small Business Innovation Research Program (Page 18).

In addition to prime contract awards of \$644.7 million, small business concerns received \$821.6 million in NASA subcontracts from major prime contractors, including the Jet Propulsion Laboratory (JPL) and certain educational and nonprofit institutions. Thus, a total of \$1,466.3 million in NASA prime and subcontract awards accrued to small business firms this fiscal year (Page 22).

Disadvantaged/minority firms received \$280.2 million of the \$1,466.3 million awarded to small business firms in prime and subcontract awards. The \$280.2 million comprised \$60.3 million in direct awards, \$127.1 million under Section 8(a) of the Small Business Act and subcontract awards of \$92.8 million (Page 23). In addition, business firms owned and controlled by women have participated in NASA's procurement program and have received prime contract awards totalling \$38.9 million, while labor surplus area preference awards totalled \$16.0 million (Page 24).

During the year, 50 states and the District of Columbia participated in NASA's prime contract awards of \$25,000 and over. These larger awards went to 2,102 business firms in 46 states and the District of Columbia and to 398 universities and nonprofit organizations in 50 states and the District of Columbia (Page 37). Four percent or \$411 million of the larger awards was placed in labor surplus areas located in 34 states and the District of Columbia (Page 39).

Note: In this report, all tables and charts present data on total procurements of the types specified in the respective sections. Where the information is limited, e.g., to contracts of \$25,000 and over, such limitation is indicated by footnotes.

NASA PROCUREMENTS FISCAL YEAR 1985

I. Total Procurements

- A. Fiscal Year 1985 NASA's procurements in Fiscal Year 1985 totalled \$8,298.0 million. This is \$943.9 million or 12.8 percent more than in Fiscal Year 1984. The number of procurement actions totalled 120.9 thousand.
- B. Trend, Fiscal Years 1981-1985 The trend in procurement obligations versus total NASA obligations during the period Fiscal Years 1981-1985 is shown in terms of dollars and percentages in the table listed below. As may be noted, procurement obligations during Fiscal Year 1985 exceeded the procurement obligations during any of the previous 4 years.

Procurement Obligations VS. Total NASA Obligations*
Fiscal Years 1981-1985
(Millions of Dollars)

		Procureme	nt Obligations
Fiscal Year	Total NASA Obligations	Amount	% of Total Obligations
1985	\$9,361.7	\$8,298.0	88.6
1984	8,355.9	7,354.1	88.0
1983	7,767.7	6,796.8	87.5
1982	6,793.2	5,883.7	86.6
1981	6,301.9	5,408.3	85.8

^{*} Total NASA obligations include salaries, benefits and travel of NASA employees.

II. Distribution by Type of Contractor

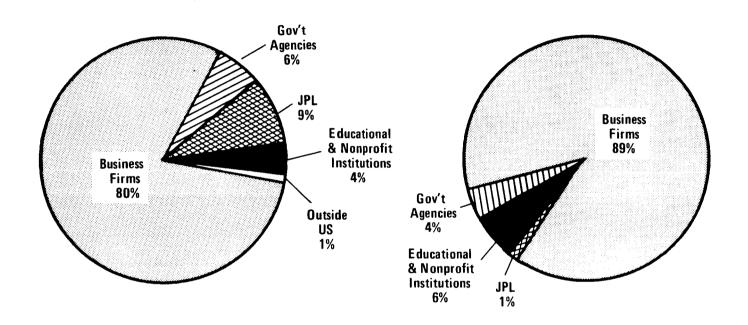
A. Fiscal Year 1985 - The distribution of NASA's procurements made directly by NASA is shown in Figure 1. Awards to business firms accounted for 80 percent of the total procurements. These awards totalled \$6,652.9 million which is \$685.5 million or 11.5 percent more than in Fiscal Year 1984. Procurements placed through other Government agencies totalled \$525.1 million, \$30.8 million or 6.2 percent more than in Fiscal Year 1984. Awards, including grants and agreements, to educational and other nonprofit institutions totalled \$360.0 million, \$38.8 million or 12.1 percent more than in Fiscal Year 1984. Awards on contracts with California Institute of Technology for operations conducted by or through the Government-owned Jet Propulsion Laboratory amounted to \$724.6 million, \$191.5 million or 35.9 percent more than in Fiscal Year 1984.

DISTRIBUTION OF DIRECT NASA PROCUREMENTS

FISCAL YEAR 1985

NET VALUE OF AWARDS

NUMBER OF ACTIONS



	(Millions)		(Thousands)
Total	\$8,298.0	<u>Total</u>	120.9
Business Firms	6,652.9	Business Firms	107.7
Educational Institutions	256.9	Educational Institutions	5.1
Nonprofit Organizations	103.1	Nonprofit Organizations	2.2
JPL	724.6	JPL	1.2
Government Agencies	- 525.1	Government Agencies	4.4
Outside United States	35.4	Outside United States	0.3

B. Trend, Fiscal Years 1981 - 1985 - The trend in the distribution of NASA's direct procurements by type of contractor during the period Fiscal Years 1981-1985 is shown in terms of dollars and in percentages of total annual procurements in the table listed below.

As may be noted, Fiscal Year 1985 awards exceeded the previous 4 years awards in all categories except outside U.S. However, the percentage distribution of the awards, remained relatively unchanged during the 5 year period.

DISTRIBUTION OF NASA DIRECT PROCUREMENTS FISCAL YEARS 1981-1985

	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985
	NET VA	LUE OF AWA	RDS (MILLI	ons)	
TOTAL	\$ <u>5,408.3</u>	\$ <u>5,883.7</u>	\$ <u>6,796.8</u>	\$ <u>7,354.1</u>	\$8,298.0
BUSINESS FIRMS EDUCATIONAL NONPROFIT JPL GOV'T AGENCIES OUTSIDE U.S.	192.5 155.1 410.8	187.0 108.8 426.3	211.3 102.5 454.9	533.1 494.3	256.9 103.1 724.6
		PERCENT	OF TOTAL		
TOTAL BUSINESS FIRMS EDUCATIONAL NONPROFIT JPL GOV'T AGENCIES OUTSIDE U.S.	100 79 3 3 8 6	100 82 3 2 7 5	100 82 3 1 7 6	100 81 3 1 7 7	100 80 3 1 9 6

Appendix I shows distribution of NASA direct procurements by type of contractor for the period Fiscal Years 1961-1985 (See Page 46).

III. Direct Awards to Business Firms

A. Extent of Competition

l. Fiscal Year 1985 - The extent of competition in NASA's direct awards to business firms during Fiscal Year 1985 is shown in Figure 2. Of the total awards of \$6,526 million, \$5,030 million or 77 percent represented competitive procurements, as compared to 73 percent in Fiscal Year 1984; \$1,496 million or 23 percent constituted other than competitive procurements. Awards to disadvantaged business firms under Section 8(a) of the Small Business Act totalling \$127.1 million are excluded from the total business dollars for the extent of competition statistics since 8(a) contracts are excepted from the requirements of the Competition in Contracting Act.

With respect to the \$5,030 million of competitive procurements, \$533 million, or 8 percent of the total awards to business firms, constituted new contracts; \$4,497 million or 69 percent represented within scope modifications (incremental funding actions and change orders) to contracts awarded competitively in prior years. In the tabulation in Figure 2, the competitive awards are further categorized to show the amounts placed on contracts awarded through sealed bidding and on contracts placed through competitive procedures. With respect to the latter contracts, offers were received from at least 2 responsible offerors capable of satisfying the requirements wholly or partially and the award or awards were made on the basis of price, design or technical competition.

All competitive negotiated procurements of \$5 million and over require that formal source evaluation board procedures be utilized in the contractor selection process. These boards are composed of qualified technical and business personnel of the field installations and Headquarters, including representatives having key assignments on the projects involved. The procedures under which the boards operate assure implementation of NASA's policy to obtain maximum competition among those sources that possess the qualifications and resources necessary to perform the proposed work.

Of the \$1,496 million of other than competitive procurements awarded during the year, \$243 million, or 4 percent of the total awards to business firms, constituted new contracts and \$1,253 million or 19 percent constituted other than competitive modifications to contracts awarded in prior years. In the tabulation in Figure 2, these other than competitive awards are further categorized to show the amount representing follow-on after competition and other noncompetitive awards.

The new follow-on after competition awards comprised other than competitive contracts placed during the year with companies that had been previously selected on a competitive basis to perform the original research and development on the applicable projects. The modifications constituting follow-on after competition awards included both modifications to these follow-on contracts awarded in prior years and also modifications to previously awarded competitive contracts where the modifications represented new procurements, e.g., acquisition of additional items of hardware. In all of these follow-on after competition awards, selection of another source would have required an extensive period of preparation for manufacturing, and additional cost to the Government by reason of duplication of investment and preparation.

The other than competitive awards included both new contracts and modifications to contracts arising from acceptable unsolicited proposals offering unique and innovative ideas and concepts. In addition, this category includes awards to contractors which meet one of the authorized exceptions permitting contracting on a basis of other than full and open competition.

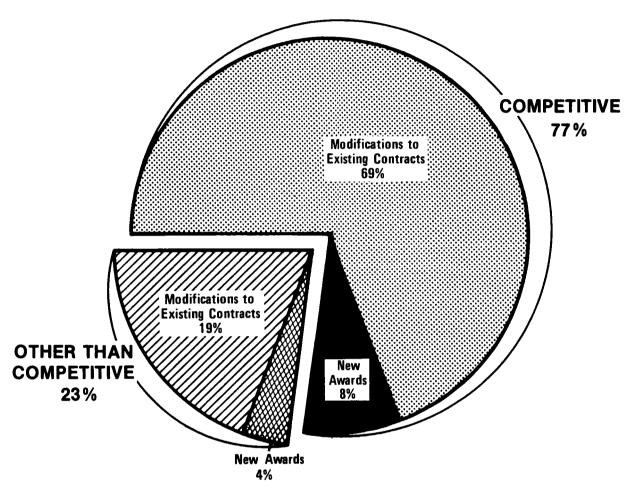
Except for purchases through or from another Government agency, utilities services available only from one source, purchases of \$500 or less, procurements of industrial facilities required in support of related procurement contracts, all other than competitive procurements require detailed written justification. Each such justification for other than competitive procurement is subjected to detailed review and approval by succeedingly higher management levels, dependent upon the dollar amount involved.

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS

FISCAL YEAR 1985

NET VALUE OF AWARDS

TOTAL \$6,525.9 MILLION



	(Millions)		(Millions)
Competitive-Total	\$5,030.2	Other Than Competitive Total	\$1,495. <u>7</u> *
New Awards Sealed Bids Negotiated	533.5 55.2 478.3	New Awards Follow-on After Competition Other	242.4 4.4 238.0
Modifications Sealed Bids Negotiated	4,496.7 22.0 4 474 7	Modifications Follow-on After Competition Other	1,253.3 219.4 1,033.9

^{*}Excludes 8(a) awards

Figure 2

When the estimated cost of a single procurement is expected to equal or exceed the contract approval authority limitation of the respective installation, as set forth in the following tabulation, final approval is reserved to the Assistant Administrator for Procurement (except where approval is delegated to the installation under the Master Buy Plan Procedure described in the next paragraph).

Contract Approval Limitations

\$5,000,000

Ames Research Center
Goddard Space Flight Center
Johnson Space Center
Kennedy Space Center
Langley Research Center
Lewis Research Center
Marshall Space Flight Center

\$2,500,000

Headquarters Contracts Division
NASA Resident Office-JPL
National Space Technology Laboratories

These approval limitations are subject to a Master Buy Plan Procedure designed to enable management to focus its attention on a representative selection of high dollar value and otherwise sensitive procurement actions without compromise of Headquarters visibility or control over essential management functions. Under this Master Buy Plan Procedure, certain procurements equal to or exceeding the dollar value limitations set forth above are selected to receive Headquarters review and approval including Procurement Plans, Request for Proposals, and contracts. The selection is made by the Assistant Administrator for Procurement with the concurrence of the cognizant Officialsin-Charge of Headquarters Offices. Criteria and procedures for submission of amendments to the Master Buy Plan for a fiscal year and selection of those to receive Headquarters review and approval are the same as those prescribed for the original Master Buy Plan for that year. Justifications for other than full and open competition procurements over \$100,000 and less than \$1 million are approved by the Deputy Director of the installation in his role as installation competition advocate. For procurements between \$1 million and \$10 million, justifications are by the Center Director or his designee. Justifications for full and open competition for procurements over \$10 million are approved by the Assistant Administrator for Procurement.

2. Trend, Fiscal Years 1981 - 1985 - The trend in the extent of competition in NASA's direct awards to business firms during the period Fiscal Years 1981-1985 is shown in terms of dollars and in percentages of total awards. This table also shows the ratio of new contract awards and awards made as modifications to existing contracts which had been awarded in previous years.

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS FISCAL YEARS 1981-1985

	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985
	NET	VALUE OF A	WARDS (MIL	LIONS)	
TOTAL BUSINESS* NEW AWARDS** MODIFICATIONS	\$4,208.2	\$4,724.5	\$5,501.2	\$5,859.3	\$6,525.9
	479.3	717.6	761.0	716.6	775.9
	3,728.9	4,006.9	4,740.2	5,142.7	5,750.0
COMPETITIVE NEW AWARDS** MODIFICATIONS	$\frac{3,127.7}{257.8}$ 2,869.9	3,436.5 351.9 3,084.6	3,845.3 446.2 3,399.1	4,286.6 426.0 3,860.6	5,030.2 533.5 4,496.7
OTHER THAN COMPETITIVE* NEW AWARDS** MODIFICATIONS	1,080.5	1,288.0	1,655.9	1,572.7	1,495.7
	221.5	365.7	314.8	290.6	242.4
	859.0	922.3	1,341.1	1,282.1	1,253.3
		PERCENT	OF TOTAL		
TOTAL BUSINESS* NEW AWARDS** MODIFICATIONS	100	100	100	100	100
	11	15	14	12	12
	89	85	86	88	88
COMPETITIVE NEW AWARDS** MODIFICATIONS	7 <u>4</u>	72	70	73	77
	6	7	8	7	8
	68	65	62	66	69
OTHER THAN COMPETITIVE* NEW AWARDS** MODIFICATIONS	26	28	30	27	23
	5	8	6	5	4
	21	20	24	22	19

^{*}Excludes 8(a) awards.

Appendix II shows extent of competition in NASA's direct awards to business firms for the period Fiscal Years 1961-1985 (See Page 49).

^{**}Data on new contracts are restricted to contracts of \$25,000 and over.

B. Awards By Contract Type

1. <u>Fiscal Year 1985</u> - Figure 3 categorizes Fiscal Year 1985 awards of \$25,000 and over to business firms in terms of contract type.

Awards on contracts having cost-plus-award-fee provisions accounted for 56 percent of the total dollars, as compared to 61 percent in Fiscal Year 1984. Incentive contracts, both cost-plus and fixed-price, were 16 percent of total dollars in Fiscal Year 1985 compared to 12 percent in Fiscal Year 1984. Firm-fixed-price contract awards amounted to 13 percent of the total and cost-plus-fixed-fee contracts represented 9 percent of the total, in Fiscal Year 1985, each increasing one percent over Fiscal Year 1984.

2. Trend, Fiscal Years 1981 - 1985 - The following tabulation shows a 5 year trend in dollars and in percentages of total annual procurements by contract type. The large percentage of procurements which have award fee and incentive provisions resulted from major procurements for the Space Shuttle program. The increase in the percentage of incentive contract dollars corresponds with the reduction in the percentage of award fee contract dollars as the Space Shuttle program becomes operational.

NASA AWARDS TO BUSINESS FIRMS BY CONTRACT TYPE*
FISCAL YEARS 1981-1985

	·				· · · · · · · · · · · · · · · · · · ·
	FY 1981	FY 1982	FY 1984	FY 1984	FY 1985
NE	T VALUE	OF AWARDS	S (MILLION	<u>1S)</u>	
TOTAL BUSINESS \$	4,146.2	\$ <u>4,675.2</u>	\$ <u>5,395.9</u>	\$ <u>5,822.8</u>	\$ <u>6,487.1</u>
FIRM-FIXED-PRICE INCENTIVE COST-PLUS-AWARD-FEE COST-PLUS-FIXED-FEE OTHER	508.0 214.2 2,887.2 366.6 170.2	3,219.7	648.6 378.4 3,625.0 421.8 322.1	3,528.8	3,630.9 587.8
		PERCENT (OF TOTAL		
TOTAL BUSINESS	100	100	100	100	100
FIRM-FIXED-PRICE INCENTIVE COST-PLUS-AWARD-FEE COST-PLUS-FIXED-FEE OTHER	12 5 70 9 4	12 6 69 8 5	12 7 67 8 6	12 12 61 8 7	13 16 56 9 6

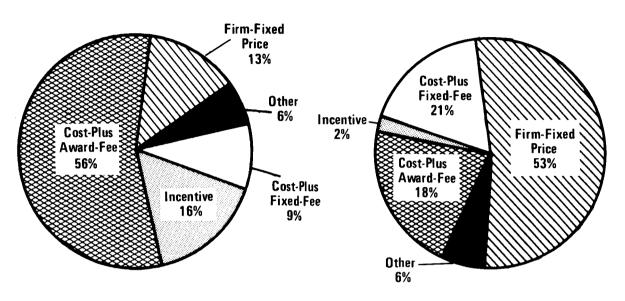
^{*}Excludes smaller procurements, generally those of less than \$25,000.

PROCUREMENTS BY CONTRACT TYPE DIRECT AWARDS TO BUSINESS FIRMS*

FISCAL YEAR 1985

NET VALUE OF AWARDS

NUMBER OF ACTIONS



	(Millions)		Actions
Total	\$6,487.1	<u>Total</u>	17,692
Incentive Fixed Price Cost-Plus-Incentive-Fee	4,635.3 60.2 944.2	Incentive Fixed Price Cost-Plus-Incentive-Fee	3,523 123 201
Cost-Plus-Award-Fee Other Fixed Price Firm	3,630.9 <u>867.9</u> 863.7	Cost-Plus-Award-Fee Other Fixed Price Firm	3,199 9,467
Redeterminable Escalation	.1 4.1	Redeterminable Escalation	9,404 2 61
Other Cost Reimbursable Cost Cost-Plus-Fixed-Fee	<u>978.9</u> 352.1 587.8	Other Cost Reimbursable Cost Cost-Plus-Fixed-Fee	3,842 141 3,643
Cost Sharing <u>Labor Hour</u> <u>Time and Materials</u>	39.0 _ <u>.5</u> _4.5	Cost Sharing <u>Labor Hour</u> <u>Time and Materials</u>	58 5 855

^{*}Excludes smaller procurements, generally those of less than \$25,000.

C. Small Business Participation in NASA Procurements

1. Fiscal Year 1985 - Prime Contract Awards

a. <u>Total Small Business</u> - During Fiscal Year 1985, NASA direct awards to small business firms totalled \$644.7 million. These awards constituted 10 percent of the total awards to business firms, one percent higher than Fiscal Year 1984. The dollar awards to small business firms in Fiscal Year 1985 resulted from 75 thousand procurement actions or 70 percent of the total number of actions placed with business firms (See Figure 4).

b. <u>Small Business Awards by Appropriation Category</u> - The following tabulation shows the total business awards, small business awards, and set-aside awards by appropriation - Space Flight Control and Data Communications (SFCDC), Research and Development (R&D), Research and Program Management (R&PM), and Construction of Facilities (CofF).

SMALL BUSINESS AWARDS BY APPROPRIATION FISCAL YEAR 1985 (MILLIONS OF DOLLARS)

	TOTAL	SFCDC	R&D	R&PM Coff
TOTAL NASA BUSINESS	\$ <u>6,652.9</u>	\$4,208.9	\$ <u>2,023.7</u>	\$ <u>251.1</u> \$ <u>169.2</u>
SMALL BUSINESS % OF TOTAL BUSINES	\$\frac{\$644.7}{9.7}\text{\chi}	\$ <u>119.7</u> 2.8%	\$343.9 17.0%	\$ <u>84.7</u> \$ <u>96.4</u> 56.9%
SET-ASIDES % of TOTAL BUSINES % of SMALL BUSINES		\$ <u>42.5</u> 1.0% 35.5%	\$ <u>131.2</u> 6.5% 38.2%	\$39.2 15.6% 46.2% \$57.1 33.7% 59.2%

^{*} Includes \$29.5 million awarded through the Small Business Innovation Research Program.

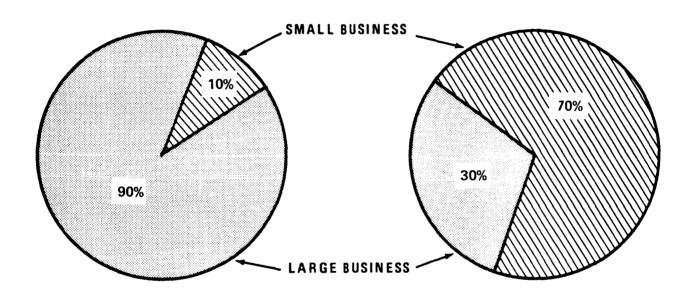
- c. Share of New Contracts The majority of NASA's direct awards to business firms involve large continuing research and development contracts for major systems and major items of hardware. Of the total new contract awards of \$803.5 million to business firms during Fiscal Year 1985, small business firms received \$249.1 million or 31.0 percent.
- d. Share of Smaller Awards Awards of less than \$25,000 to business firms during Fiscal Year 1985 totalled \$165.8 million. Of these smaller awards, small business firms received \$86.2 million or 52 percent.

SMALL BUSINESS PARTICIPATION IN NASA PROCUREMENTS

FISCAL YEAR 1985

NET VALUE OF AWARDS

NUMBER OF ACTIONS



	(Millions)		(Thousands)
Total	\$6,652.9	Total	_107.7
Small Business Large Business	644.7* 6,008.2	Small Business Large Business	75.3 32.4

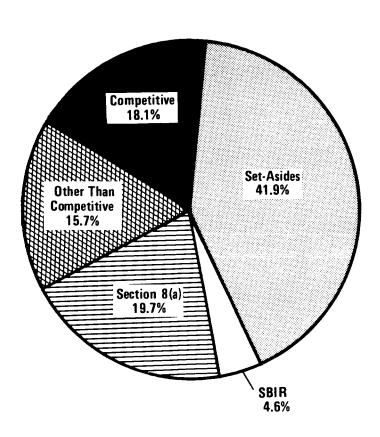
^{*}Includes \$127.1 million awarded to small minority firms under Authority of Section 8(a) of the Small Business Act, also includes \$29.5 million awarded through the Small Business Innovation Research Program.

- e. Extent of Maximum Possible Participation in New Awards Assuming that the smaller awards represented new purchases and contracts, the total amount of new business awards in which small business could have participated was \$969.3 million, consisting of the \$803.5 million in new awards of \$25,000 and over and the \$165.8 million in awards of less than \$25,000. Of this \$969.3 million in new business awards, small business received \$335.3 million or 35 percent.
- f. <u>Small Business Set-Asides</u> Small business set-asides are defined as competitive awards which are limited only to small business. The small business set-aside program continues to exert a strong influence on the capability of small business firms to participate in the space program. In FY 1985, these set-asides amounted to \$270.0 million representing 42 percent of the total awards to small business and 4 percent of the total awards to all business firms.
- g. Small Business Innovation Research Awards The Small Business Innovation Development Act of 1982, P.L. 97-219, became law on July 22, 1982. The Act mandated that Federal agencies whose extramural budgets for research or research development exceeded a stated threshold, establish a Small Business Innovation Research Program. Statutory requirements are aimed at assisting small/small disadvantaged business participation in the objectives of the program: to stimulate technological innovation in the private sector; to strengthen the role of small business in meeting Federal research and development needs; increase the commercialization of innovations derived from Federal research and development; and to encourage small disadvantaged business participation in technological innovation. During FY 1985, NASA awarded 183 SBIR contracts totalling \$29.5 Of this amount, 125 were Phase I awards totalling \$6.1 million and 58 were Phase II awards totalling \$23.4 million. Included in these awards are 20 contracts or \$3.5 million to small disadvantaged business firms.
- h. Other Preferential Small Business Awards In addition to the \$270.0 million in small business set-asides and the \$29.5 million awarded through the Small Business Innovation Research Program, small business firms eligible for participation in the Section 8(a) Program received a total of \$127.1 million in such awards. Also, small business firms received \$101.5 million in other than competitive procurement awards (See Figure 5).
- i. Representation Among NASA's 100 Largest Contractors The 100 contractors that received the largest dollar value of NASA's direct awards to business firms are listed on Pages 25-29. Twenty-three of these contractors are small business firms and 14 are disadvantaged/minority firms.

COMPETITION IN SMALL BUSINESS AWARDS

FISCAL YEAR 1985

NET VALUE OF AWARDS



	(Millions)
Total Small Business	\$644.7
Set-Asides	270.0
Section 8(a)	127.1
Competitive	116.6
Other Than Competitive	101.5
SBIR	29.5

Figure 5

2. Trend, Fiscal Years 1981 - 1985 - Prime Contract Awards. The table below shows the extent of small business participation in NASA's procurements for the period Fiscal Years 1981 - 1985.

SMALL BUSINESS PARTICIPATION IN NASA PROCUREMENTS FISCAL YEARS 1981 - 1985 (MILLIONS OF DOLLARS)

<u></u>					
	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985
TOTAL BUSINESS	\$4,272.8	\$4,805.6	\$5,586.0	\$5,967.4	\$6,652.9
SMALL BUSINESS	\$409.4	\$430.1	\$482.3*	\$556.2*	<u>\$644.7</u> *
SMALL BUSINESS % OF TOTAL	<u>9.6</u> %	<u>8.9</u> %	<u>8.6</u> %	9.3%	<u>9.7</u> %

^{*} Includes awards through the Small Business Innovation Research Program.

Appendix III shows NASA direct awards to small business firms for the period Fiscal Years 1961-1985 (See Page 52).

- 3. Small and Disadvantaged/Minority Business Subcontracting Program Under provisions of the Small Business Act of 1958 as amended, Federal agencies must ensure that small business and disadvantaged/minority firms are afforded maximum practicable opportunity to participate as subcontractors on the larger prime contracts (those in excess of \$500,000, or in the case of construction, \$1,000,000). The extent of the subcontracting effort by NASA's prime contractors is reported on Standard Form 295.
- a. <u>Fiscal Year 1985</u> During Fiscal Year 1985, NASA prime contractors, including the Jet Propulsion Laboratory, reported subcontracts totalling \$2,545.7 million of their NASA business to business firms, of which \$821.6 million or 32 percent was placed with small business. This included \$92.8 million in awards to disadvantaged/minority firms, which represents 3.6 percent of the total subcontract awards, and 11.3 percent of the subcontract awards to small business.

b. <u>Trend, Fiscal Years 1981 - 1985</u> - The following table shows the extent of subcontracting to small business and small business disadvantaged/minority firms.

NASA SMALL BUSINESS SUBCONTRACTING PROGRAM AWARDS FISCAL YEARS 1981 - 1985 (MILLIONS OF DOLLARS)

	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985
Subcontracted Total* Small Business	\$1,472.1 \$474.9	\$1,646.2 \$523.4	\$1,879.5 \$664.9	\$2,317.6 \$835.2	\$2,545.7 \$821.6
% to Small Business	32%	32%	35%	36%	32%
<u>Disadvantaged/</u> Minority Busine	ss \$50.7	<u>\$54.9</u>	\$68.4	\$73.2	<u>\$92.8</u>
% of Total Subcontracts	3%	3%	4%	3%	4%
% of Small Business Sub- contracts	11%	10%	10%	9%	11%

^{*} Includes industry, JPL, educational and nonprofit subcontract awards.

4. Total Prime Contract and Subcontract Awards to Small Business, Fiscal Years 1981 - 1985 - Small business firms received awards totalling \$644.7 million in NASA prime awards. In addition, small business received a total of \$821.6 million in NASA subcontract awards from major prime contractors, including the Jet Propulsion Laboratory, certain educational and nonprofit institutions, bringing the total awards small business received to \$1,466.3 million for Fiscal Year 1985.

The following tabulation shows prime contract and sub-contract awards for the period Fiscal Years 1981 - 1985.

TOTAL NASA PRIME CONTRACT AND SUBCONTRACT AWARDS TO SMALL BUSINESS FISCAL YEARS 1981 - 1985 (MILLIONS OF DOLLARS)

	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985
SMALL BUSINESS	\$884.3	<u>\$953.5</u>	\$1,147.2	\$1,391.4	\$1,466.3
PRIME SUBCONTRACT**	409.4 474.9	430.1 523.4	482.3* 664.9	556.2* 835.2	644.7* 821.6

^{*} Includes awards through the Small Business Innovation Research Program.

^{**} Includes industry, JPL, educational and nonprofit subcontract awards.

5. Disadvantaged/Minority Business Awards - In conformance with Executive Order 11625, October 13, 1971, and the Small Business Act of 1958 as amended, it has been determined that the national interest requires involvement of disadvantaged/minority business enterprises in Federal procurement programs. In support of this policy, NASA has made continuing efforts to increase disadvantaged/minority business participation in NASA's procurements through (1) direct awards, (2) awards placed through the Small Business Administration under Section 8(a) of the Small Business Act and (3) disadvantaged/minority business subcontracting program. The significant results of these efforts during the period Fiscal Years 1981 - 1985 are shown in the tabulation Of further interest is the increased scope of the services which are being procured; from almost entirely custodial, janitorial, maintenance and repair services in the early years, to approximately 65 percent for technical services, computer programming and analysis, architect-engineer services, and research and development in Fiscal Year 1985.

DISADVANTAGED/MINORITY
BUSINESS PARTICIPATION IN NASA PROCUREMENTS
FISCAL YEARS 1981 - 1985
(MILLIONS OF DOLLARS)

\$280.215	\$60.351*	\$127.061	\$92.803
229.990	48.677*	108.113	73.200
189.093	35.851*	84.827	68,415
163.204	27.227	81.060	54.917
137.983	22.658	64.619	50.706
	229.990 189.093 163.204	229.990 48.677* 189.093 35.851* 163.204 27.227	229.990 48.677* 108.113 189.093 35.851* 84.827 163.204 27.227 81.060

^{*} Includes disadvantaged direct awards through the Small Business Innovation Research Program.

^{**} Includes industry, JPL, educational and nonprofit subcontract awards.

- D. <u>Women-Owned Business Awards</u> In accordance with Executive Order 12138, NASA extends a particular effort to ensure that business firms owned and controlled by women have an equitable opportunity to participate in NASA's Procurement Program. In Fiscal Year 1985, women-owned business firms received prime contract awards totalling \$38.9 million.
- E. <u>Labor Surplus Preference Awards</u> It is NASA policy to assist labor surplus area concerns to an extent consistent with procurement objectives and regulations. When practicable, NASA will set-aside procurements for the participation of those firms which will ensure that a significant part of the contract work will be performed in designated labor surplus areas. During Fiscal Year 1985, labor surplus area preference awards totalled \$16.0 million.
- F. Awards to Business Firms by Type of Effort During Fiscal Year 1985, \$6,487.1 million was awarded to business firms in support of effort in research and development, services, and supplies and equipment procurements. A breakout of these awards by category is shown below:

<u>Category</u>	Number of Contracts	Total (Millions)
<u>Total</u>	5,955	\$ <u>6,487.1*</u>
Research & Development Aeronautics & Space Technology Space Science & Applications Space Flight Space Tracking & Data Systems Other Space R&D Energy R&D	1,874 822 507 203 100 239 3	4,214.9 407.0 333.1 3,174.6 201.8 84.9 13.5
Services	1,864	1,877.2
Supplies & Equipment	2,217	395.0

^{*} Excludes smaller procurements, generally those of less than \$25,000.

G. One Hundred Principal Contractors (Business Firms) - The one hundred contractors that received the largest dollar value of NASA direct awards to business firms during Fiscal Year 1985 are shown below. The awards to these contractors accounted for 90 percent of the direct awards to business firms during the year. The smallest aggregate award to any contractor was in excess of \$4.2 million. Of the one hundred contractors, 23 are small business firms and 14 are disadvantaged/minority firms.

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS FISCAL YEAR 1985

	CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE		
TOT	TAL AWARDS TO BUSINESS FIRMS	\$6,652,918	100.00
1.	ROCKWELL INTERNATIONAL CORP Downey, CA	1,345,265	20.22
2.		551,235	8.29
3.		482,520	7.25
4.		334,151	5.02
5.		300,284	4.51
6.	UNITED SPACE BOOSTERS INC Huntsville, AL	207,336	3.12
7.		193,728	2.91
8.	ALLIED BENDIX AEROSPACE Columbia, MD	150,229	2.26
9.	LOCKHEED MISSILES & SPACE CO Sunnyvale, CA	136,679	2.05
10.		124,869	1.88
11.		124,224	1.87
12.		120,287	1.81
13.		110,067	1.65
14.		108,064	1.62
15.	T R W INC Redondo Beach, CA	103,181	1.55

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS (CONT'D) FISCAL YEAR 1985

	CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE	NET VALUE OF THOUSANDS %	AWARDS OF TOTAL
16.	COMPUTER SCIENCES CORP	\$102,273	1.54
17.	Houston, TX R C A CORP Princeton, NJ	102,088	1.53
18.	SPACE COMMUNICATIONS CO Gaithersburg, MD	98,389	1.48
19.	BOEING CO Huntsville, AL	69,176	1.04
20.	PLANNING RESEARCH CORP Kennedy Space Center, FL	65,285	.98
21.	PERKIN ELMER CORP Danbury, CT	63,659	.96
22.	PAN AMERICAN WORLD SERV INC Bay St. Louis, MS	49,269	.74
23.	TELEDYNE INDUSTRIES INC Huntsville, AL	45,837	.69
24.	GENERAL ELECTRIC CO King of Prussia, PA	43,471	.65
25.	SINGER CO Houston, TX	42,552	.64
26.	BOEING TECHNICAL OPERAT INC Kennedy Space Center, FL	39,304	.59
27.	NORTHROP SERVICES INC	39,127	.59
28.	Houston, TX HUGHES AIRCRAFT CO	38,134	.57
29.	EL Segundo, CA LOCKHEED CORP	30,451	.46
30.	Marietta, GA BALL CORP	30,123	.45
31.	Boulder, CO MANAGEMENT & TECHNICAL SERVCS	26,444	.40
32.	Houston, TX SPERRY CORP	25,239	.38
33.	Houston, TX RAYTHEON SERVICE CO	24,999	.38
34.		24,353	.37
35.		20,176	.30
36.		19,471	.29
37.	Mountain View, CA SYSTEM DEVELOPMENT CORP Slidell, LA	18,753	.28

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS (CONT'D) FISCAL YEAR 1985

	CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE	NET VALUE OF THOUSANDS %	
38.		\$18,656	.28
39.	Chippewa Falls, WI L T V AEROSPACE & DEFENSE CO	17,393	.26
40.	Dallas, TX AMERICAN TELEPHONE & TELEGRPH	16,570	.25
	Greenbelt, MD		
41.	INFORMATICS GENERAL CORP Mountain View, CA	15,607	.23
42.	DIGITAL EQUIPMENT CORP	15,266	.23
43.	Huntsville, AL HONEYWELL INFORMATION SYSTEMS	14,330	.22
	McLean, VA INTERNATIONAL FUEL CELLS CORP	14,286	.21
44.	South Windsor, CT	·	
45.	BAMSI INC Huntsville, AL	(S)(M) 13,410	.20
46.	MANAGEMENT SERVICES INC	(S) 13,353	.20
47	Huntsville, AL HONEYWELL INC	13,089	.20
	Clearwater, FL	•	.19
48.	WESTINGHOUSE ELECTRIC CORP Large, PA	12,819	
49.	NORTHROP WORLDWIDE AIRCRAFT	12,651	.19
50.	Houston, TX MECHANICAL TECHNOLOGY INC	12,619	.19
E1	Latham, NY SPECIALTY MAINTENANCE & CONST	(S) 12,203	.18
	Kennedy Space Center, FL	•	
52.	KLATE HOLT CO Hampton, VA	(S) 11,445	.17
53.	ANALEX CORP	(S) 11,410	.17
54.	Cleveland, OH AMDAHL CORP	11,315	.17
55.	Sunnyvale, CA WYLE LABORATORIES	(M) 10,765	.16
55.	Hampton, VA		
56.	VIRGINIA ELECTRIC & POWER CO Hampton, VA	10,730	.16
57.	PERINI CORP	10,056	.15
58.	Mountain View, CA GENERAL MOTORS CORP	9,934	.15
	Indianapolis, IN	(S)(M) 9,861	.15
59.	R M S TECHNOLOGIES INC Greenbelt, MD	(5/(M/ 5,001	.13

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS (CONT'D) FISCAL YEAR 1985

	CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE		VALUE OF A	
60.	TECHNOLOGY DEVELOPMENT CALIF Mountain View, CA	(S)(M)	\$9,822	.15
61.	GRUMMAN AEROSPACE CORP		9,769	.15
62.	Bethpage, NY AEROJET GENERAL CORP		9,586	.14
63.	Sacramento, CA GARRETT CORP		9,171	.14
64.	Phoenix, AZ BARRIOS TECHNOLOGY INC	(S)(M)	8,982	.13
65.			8,671	.13
66.	Houston, TX NEW TECHNOLOGY INC	(S)(M)	8,193	.12
67.	Huntsville, AL SCIENCE APPLICATIONS RES JV Riverdale, MD	(M)	7,991	.12
68.	O A O CORP	(S)(M)	7,980	.12
69.	Greenbelt, MD BIONETICS CORP Hampton, VA	(S)	7,732	.12
70.	DOSTER CONSTRUCTION CO INC Kennedy Space Center, FL		7,632	.11
71.	CLEVELAND ELECTRIC ILLUMINATG Cleveland, OH		7,251	.11
72.	OMNIPLAN CORP	(S)(M)	7,145	.11
73.	Houston, TX S Y R E JV Mountain View, CA		7,073	.11
74.	SVERDRUP TECHNOLOGY INC Middleburgh Heights, OH		6,618	.10
75.	SMITH ENGRG & CONTRACT SERVS Mountain View, CA	(S)(M)	6,505	.10
76.	MOTOROLA INC Scottsdale, AZ		6,472	.10
77.	S A S C TECHNOLOGIES INC Riverdale, MD	(M)	6,457	.10
78.			5,963	.09
79.			5,759	.09
80.	DEI EAST INC Newport News, VA	(S)	5,729	.09
81.	G T E COMMUNICATION SYSTEMS Kennedy Space Center, FL		5,682	.09

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS (CONT'D) FISCAL YEAR 1985

1	CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE		VALUE OF JSANDS %	
82.	ALPHA BUILDING CORP Houston, TX	(S)	\$5,654	.08
83.	ARVIN INDUSTRIES INC Mountain View, CA		5,502	.08
84.	INTERGRAPH CORP Huntsville, AL		5,390	.08
85.	MCLAUGHLIN D L CO INC Mountain View, CA	(S)	5,361	.08
86.	GOULD INC Greenbelt, MD		5,288	.08
87.	TECHNOLOGY INC Houston, TX		5,214	.08
88.	TAFT BROADCASTING CORP Houston, TX	(S)	5,151	.08
89.	MICRO CRAFT INC Tullahoma, TN	(S)	4,904	.07
90.	COLEJON MECHANICAL CORP Cleveland, OH	(S)(M)	4,812	
	ENGINEERING & ECONOMICS RES Vienna, VA		4,693	
_	DALTON DALTON NEWPORT INC Shaker Heights, OH	(S)	4,654	
	SCIENCE APPLICATION INTL CORP La Jolla, CA		4,601	
	JOHNSON ENGINEERING CORP Houston, TX	(S)		
	BOOZ ALLEN & HAMILTON INC Bethesda, MD		4,584	
	XEROX CORP Houston, TX		4,408	
_	CHESAPEAKE & POTOMAC TELEPHONE Greenbelt, MD		4,399	
	ROLM CORP Santa Clara, CA	/ = N / - N	4,345	
	COMPUTER TECHNOLOGY ASSOCS Englewood, CO	(S)(M)		
100.	AMERICAN SATELLITE CO Greenbelt, MD		4,217	
	OTHER*		696,238	10.47

 ^{*} Includes other awards over \$25,000 and smaller procurements less than \$25,000.
 (S) Indicates small business concerns.
 (M) Indicates disadvantaged/minority business firms.

IV. Awards to Educational and Other Nonprofit Institutions*

A. Distribution by Type of Institution and Award - During Fiscal Year 1985, \$360.0 million was awarded to educational and other nonprofit institutions. Of this amount, \$256.9 million was awarded to educational institutions and \$103.1 million to other nonprofit organizations. A breakout of these awards between contracts, grants and agreements is shown below:

Type of Award	Total (Millions)	Educational Institutions (Millions)	Nonprofit Organizations (Millions)
Total	\$360.0	\$256.9*	\$103.1
Contracts	189.2	97.2	92.0
Grants	148.2	139.1	9.1
Agreements	22.6	20.6	2.0

^{*}Excludes JPL.

With respect to research contracts, approximately 60 percent of the dollars represented actions on cost (no fee) contracts and 23 percent represented actions on cost-plus-fixed-fee contracts. Actions on the cost-plus-fixed-fee contracts involve 36 new contracts.

B. One Hundred Principal Educational & Nonprofit Institutions* - The one hundred educational and nonprofit institutions that received the largest dollar value of NASA awards during Fiscal Year 1985 are shown on Pages 31-35.

The awards to these institutions accounted for 87 percent of the total awards to educational and nonprofit institutions during the period. The smallest aggregate award was \$601 thousand.

Eighty of the top 100 were educational institutions; 20 were nonprofit organizations.

^{*}Excludes JPL.

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS* FISCAL YEAR 1985

	INSTITUTION & PRINCIPAL PLACE OF PERFORMANCE		ET VALUE OF HOUSANDS %	AWARDS OF TOTAL
	AL AWARDS TO EDUCATIONAL NONPROFIT INSTITUTIONS		\$360,034	100.00
1.	STANFORD UNIV Stanford, CA		17,177	4.77
2.	ASSN UNIV RESEARCH & ASTRON Baltimore, MD	(N)	15,581	4.33
3.	MASS INSTITUTE TECHNOLOGY Cambridge, MA		14,411	4.00
4.	NATIONAL ACADEMY SCIENCES Washington, DC	(N)	11,750	3.26
5.	DRAPER CHARLES STARK LAB INC Cambridge, MA	(N)	11,163	3.10
6.	UNIV CALIF SAN DIEGO La Jolla, CA		9,462	2.63
7.	UNIVERSITIES SPACE RESEARCH Columbia, MD	(N)	8,843	2.46
8.	SMITHSONIAN INSTITUTION Cambridge, MA	(N)	8,092	2.25
9.		(N)	7,672	2.13
10.	UNIV MICHIGAN ANN ARBOR Ann Arbor, MI		7,622	2.12
11.	UNIV WISCONSIN MADISON Madison, WI		7,466	2.07
12.	HARVARD UNIV Cambridge, MA		7,457	2.07
13.	UNIV COLORADO BOULDER Boulder, CO		7,413	2.06
14.	CALIF INSTITUTE TECHNOLOGY Pasadena, CA		7,280	2.02
15.	UNIV MARYLAND COLLEGE PARK College Park, MD		6,520	1.81
16.	UNIV ARIZONA Tucson, AZ		6,233	1.73
17.	UNIV CORP ATMOSPHERIC RESEARCH Palestine, TX	(N)	5,841	1.62
18.	UNIV HAWAII Honolulu, HI		5,651	1.57
19.	UNIV CHICAGO Chicago, IL		5,372	1.49
20.	UNIV CALIF BERKELEY Berkeley, CA		5,216	1.45
21.	JOHN HOPKINS UNIV Baltimore, MD		4,530	1.26
	· · · · · · · · · · · · · · · · · · · 			

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS* (CONT'D) FISCAL YEAR 1985

	INSTITUTION & PRINCIPAL PLACE OF PERFORMANCE		NET VALUE (THOUSANDS	OF AWARDS % OF TOTAL
22.	UNIV NEW HAMPSHIRE Durham, NH		\$4,511	1.25
23.	UNIV CALIF LOS ANGELES Los Angeles, CA		4,309	1.20
24.	BATTELLE MEMORIAL INSTITUTE Columbus, OH	(N)	4,250	1.18
25.	UNIV IOWA Iowa City, IA		3,989	1.11
26.	HAMPTON City Hampton, VA	(N)	3,806	1.06
27.	NEW MEXICO STATE UNIV LAS CRU LAS Cruces, NM		3,558	.99
28.	UNIV CHILE Santiago Chile, CL		3,519	.98
29.	CASE WESTERN RESERVE UNIV Cleveland, OH		3,505	.97
	CORNELL UNIV		3,440	
31.	RESEARCH TRIANGLE INSTITUTE Research Triangle Park, NC	(N)	3,284	.91
32.	AMERICAN INSTIT AERON & ASTRO New York, NY	(N)	2,907	.81
	UNIV TEXAS AUSTIN Austin, TX		2,905	.81
	UNIV WASHINGTON Seattle, WA		2,895	.80
	UNIV ILLINOIS URBANA Urbana, IL		2,845	.79
	OLD DOMINION UNIV Norfolk, VA		2,757	.77
	VIRGINIA POLYTECHNIC INSTITUT BLACKSBURG, VA		2,682	.74
	PRINCETON UNIV Princeton, NJ		2,656	.74
39.	COLUMBIA UNIV New York, NY		2,640	.73
40.	UNIV ALABAMA HUNTSVILLE Huntsville, AL		2,554	•71
41.	PENNSYLVANIA STATE UNIV UP University Park, PA		2,505	.70
42.	WASHINGTON UNIV ST LOUIS St. Louis, MO		2,446	.68

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS* (CONT'D) FISCAL YEAR 1985

	INSTITUTION & PRINCIPAL PLACE OF PERFORMANCE		VALUE OF	AWARDS OF TOTALS
43.	GEORGE INSTITUTE TECHNOLOGY Atlanta, GA		\$2,310	.64
44.			2,214	.61
45.			2,187	.61
46.	S R I INTERNATIONAL CORP Menlo Park, CA	(N)	2,185	.61
47.			2,112	.59
48.			2,073	.58
	PURDUE UNIV West Lafayette, IN		1,975	
	ARIZONA STATE UNIV Tempe, AZ		1,922	
	OHIO STATE UNIV Columbus, OH		1,818	
	UNIV ALASKA FAIRBANKS Fairbanks, AK		1,798	
	TEXAS A & M UNIV College Station, TX		1,731	
	UNIV TEXAS DALLAS Richardson, TX		1,615	
	UTAn STATE UNIV Logan, UT		1,545	
	UNIV TEXAS HEALTH SCI CTR HOU Houston, TX		1,444	
	SAN JOSE STATE UNIV Mountain View, CA		1,444	
	UNIV CALIF SANTA BARBARA Santa Barbara, CA		1,326	
	BROWN UNIV Providence, RI	4	1,308	
60.	UNIV CITY SCIENCE CENTER Philadelphia, PA	(N)	1,276	.35
61.	UNIV VIRGINIA Charlottesville, VA		1,138	.32
62.	RENSSELAER POLY INST N Y Troy, NY		1,130	.31
63.	COLORADO STATE UNIV Fort Collins, CO		1,103	.31

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS* (CONT'D) FISCAL YEAR 1985

	INSTITUTION & PRINCIPAL PLACE OF PERFORMANCE		T VALUE OF OUSANDS %	
64.	CENTER FOR BLOOD RESEARCH INC	(N)	\$1,084	.30
65.	Boston, MA MITRE CORP	(N)	1,072	.30
66.	McLean, VA UNIV SOUTHERN CALIF		1,061	.29
67.	Los Angeles, CA FOOTHILL COLLEGE		1,038	.29
68.	Mountain View, CA UNIV CINCINNATI		1,033	.29
69.	Cincinnati, OH UNIV PITTSBURGH		1,004	.28
70.	Pittsburgh, PA CLEVELAND STATE UNIV		971	.27
71.	Cleveland, OH COLLEGE WILLIAM & MARY		917	.25
72.	Williamsburg, VA UNIV CALIF IRVINE		916	.25
73.	Irvine, CA UNIV KANSAS		913	.25
74.	Lawrence, KS ALABAMA A & M UNIV		893	.25
75.	Normal, AL RICE UNIV		880	.24
76.	Houston, TX UNIV UTAH		871	.24
77.	Salt Lake City, UT STATE UNIV NEW YORK ALBANY Buffalo, NY		864	.24
78.	UNIV HOUSTON Houston, TX		853	.24
79.	UNIV PENNSYLVANIA Philadelphia, PA		844	.23
80.	NORTH CAROLINA STATE UNIV Raleigh, NC		838	.23
81.	AMERICAN INSTIT BIOLOG SCIENCE Arlington, VA	(N)	833	.23
82.	UNIV CALIF SAN FRANCISCO Mountain View, CA		783	.22
83.	UNIV MIAMI Coral Gables, FL		747	.21
84.	AEROSPACE CORP EL Segundo, CA	(N)	746	.21

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS* (CONT'D) FISCAL YEAR 1985

	INSTITUTION & PRINCIPAL PLACE OF PERFORMANCE		VALUE OF USANDS %	
85.	AUBURN UNIV AUBURN Auburn, AL		\$717	.20
86.	COUNCIL CHIEF STATE SCH OFF Washington, DC	(N)	714	.20
87.	TUSKEGEE INSTITUTE Tuskegee, AL		714	.20
88.			703	.19
89.	INDIANAPOLIS CENTER ADV RES Indianapolis, IN	(N)	689	.19
90.			686	.19
91.			669	.19
92.			667	.19
93.	HAMPTON INSITUTE		666	.18
94.	Hampton, VA STATE UNIV NEW YORK STONY BRK		662	.18
95.	Stony Brook, NY BRANDEIS UNIV		649	.18
96.			639	.18
97.	_ • · · - · · · · · · · · · · · · · · · ·		631	.18
98.	Durham, NC PUBLIC SERV SATELLITE CONSORT	(N)	618	.17
99.			611	.17
100.	Pittsburgh, PA UNIV CALIF RIVERSIDE Riverside, CA		601	.17
	OTHER**		45,868	12.74

^{*} Excludes JPL.

^{**} Includes other awards over \$25,000 and smaller procurements less than \$25,000.

⁽N) Indicates nonprofit institutions.

V. <u>Contract With California Institute of Technology For Operation</u> of Jet Propulsion Laboratory

The Jet Propulsion Laboratory (JPL) is a Government-owned research and development facility, operated for NASA by the California Institute of Technology. The Laboratory carries out research programs and flight projects and conceives and executes advanced development and experimental engineering investigations to further the technology required for the Nation's space program. The primary emphasis of the Laboratory's effort is on the carrying out of unmanned lunar, planetary and deep-space scientific missions.

Net awards during Fiscal Year 1985 totalled \$724.6 million. Of this amount, \$357.6 million was placed through subcontracts or purchases with business firms.

VI. <u>Purchases and Contracts Placed With or Through Other</u> <u>Government Agencies</u>

During Fiscal Year 1985, \$525.1 million was awarded with or through other Government agencies. The following table shows the distribution of these awards by agency.

PURCHASES AND CONTRACTS PLACED WITH OR THROUGH OTHER GOVERNMENT AGENCIES FISCAL YEAR 1985

AGENCY	MILLIONS	% OF TOTAL
TOTAL	\$ <u>525.1</u>	100.0
\$25,000 AND OVER TREASURY DEPARTMENT AIR FORCE NAVY ENERGY DEPARTMENT ARMY INTERIOR DEPARTMENT COMMERCE DEPARTMENT NATIONAL SCIENCE FOUND OTHER GOV'T AGENCIES	418.7 210.7 110.4 38.9 15.3 12.0 9.7 8.0 4.8 8.9	79.7 40.1 21.0 7.4 2.9 2.3 1.9 1.5 0.9
<u>UNDER \$25,000</u>	106.4	20.3

VII. <u>U. S. Geographical Distribution of NASA Procurements -</u> Prime Contract Awards

In Fiscal Year 1985, 50 states and the District of Columbia participated in NASA's direct awards of \$25,000 and over. These larger awards were distributed among 9,494 contracts and went to 2,500 different organizations in 895 different cities. Of the 2,500 organizations, 2,102 are business firms located in 775 cities in 46 states and the District of Columbia; 398 are educational & nonprofit institutions located in 271 cities in 50 states and the District of Columbia (See Page 38).

The categorization of NASA procurements by state is based on the location where the items are to be produced or supplied from stock; where the services will be performed; or with respect to construction contracts, the construction site.

U.S. GEOGRAPHICAL DISTRIBUTION OF NASA PRIME CONTRACT AWARDS FISCAL YEAR 1985

	TOT	`AI.	RIICT	NESS E	DUCATION &	NONPROFIT
		PERCENT		PERCENT	DOCILITON W	PERCENT
STATE	THOUSANDS	OF TOTAL	THOUSANDS	OF TOTAL	THOUSANDS	OF TOTAL
TOTAL	\$6,835,240	100.0	\$6,482,529	100.0	\$352,711	100.0
ALABAMA	377,117	5.5	370,347	5.7	6,770	1.9
ALASKA	1,776	*	(22)		1,798	0.5
ari zona	28,993	0.4	20,563	0.3	8,430	2.4
ARKANSAS	299	*	242	*	57	*
CALIFORNIA	2,236,531	32.7	2,173,090	33.5	63,441	18.0
COLORADO	127,455	1.9	117,558	1.8	9,897	2.8
CONNECTICUT	172,360	2.5	171,264	2.6	1,096	0.3
DELAWARE	1,697	*	1,335	*	362	0.1
DIST COLUMBIA	37,929	0.6	17,857	0.3	20,072	5.7
FLORIDA	979,033	14.3	976,081	15.1	2,952	0.8
GEORGIA	20,305	0.3	16,936	0.3	3,369	1.0
HAWAI I	5,746	0.1	113	•	5,633	1.6
IDAHO	212	*		_	212	0.1
ILLINOIS	17,067	0.2	7,572	0.1	9,495	2.7
INDIANA	14,202	0.2	10,699	0.2	3,503	1.0
IOWA	4,321	0.1	98	*	4,223	1.2
KANSAS	2,351	*	911	*	1,440	0.4
KENTUCKY	635	*	273	*	362	0.1
LOUISIANA	394,624	5.8	393,808	6.1	816	0.2
MAINE	403	•	130	*	273	0.1
MARYLAND	587,567	8.6	556,351	8.6	31,216	8.8
MASSACHUSETTS	68,195	1.0	23,642	0.4	44,553	12.6
MI CHI GAN	14,587	0.2	6,074	0.i	8,513	2.4
MINNESOTA	10,289	0.2	8,172	0.1	2,117	0.6
MISSISSIPPI	53,875	0.8	53,572	0.8	303	0.1
MISSOURI	12,705	0.2	9,715	0.1	2,990	0.8
MONTANA	248	*	5,115	-	248	0.1
NEBRASKA	244	*	26	*	218	0.1
NEVADA	616	*	196	*	420	0.1
NEW HAMPSHIRE		0.1	834	*	4,519	1.3
	108,292	1.6	105,118	1.6	3,174	0.9
NEW JERSEY		0.4	24.077	0.4	4,240	1.2
NEW MEXICO	28,317 58,182	0.9		0.7	14,744	4.2
NEW YORK		0.1	43,438 1,648	*	5,862	1.7
NORTH CAROLIN NORTH DAKOTA	15	*	1,046	_	15	*
OHIO	115,872	1.7	102,023	1.6	13,849	3.9
OKLAHOMA	2,607	*	120	*	2,487	0.7
OREGON	4,050	0.1	2,683	*	1,367	0.4
PENNSYLVANIA	69,430	1.0	62,925	1.0	6,505	1.8
RHODE ISLAND	1.481	*	144	*	1,337	0.4
SOUTH CAROLIN	A 551	*	183	*	368	0.1
SOUTH DAKOTA	829	*	13	*	816	0.2
TENNESSEE	7,736	0.1	5,972	0.1	1,764	0.5
TEXAS	657,512	9.6	631,542	9.7	25,970	7.4
UTAH	335,823	4.9	333,311	5.1	2,512	0.7
VERMONT	82	*	(1)		83	*
VIRGINIA	187,973	2.8	171.330	2.6	16,643	4.7
WASHINGTON	42,813	0.6	39,774	0.6	3,039	0.9
WEST VIRGINIA		*	269	*	82	*
WISCONSIN	28,494	0.4	20,523	0.3	7,971	2.3
		*	20,323	J.J		
WYOMI NG	585	*	-	-	585	0.2

^{*}Less than .05 percent.

Note: Excludes smaller procurements, generally those of less than \$25,000; also excludes awards placed through other Government agencies, awards outside the U.S., and actions on the JPL contracts.

VIII. NASA Prime Contract Awards Placed in Labor Surplus Areas*

Of NASA's direct awards of \$6,835 million to U.S. business firms, educational and nonprofit institutions during Fiscal Year 1985, \$411 million or 6 percent were placed in areas which were designated by the Department of Labor as labor surplus areas at the time of the awards. The labor surplus areas receiving awards included 214 cities located in 34 states and the District of Columbia. The states that received labor surplus awards are shown in the table listed below. The 10 geographic locations receiving the largest share of labor surplus awards were Cleveland, Ohio; Bay St. Louis, Mississippi; Washington, D.C.; Allentown, Pennsylvania; Seattle, Washington; Baltimore, Maryland; Camden, New Jersey; Edwards, California; Chippewa Falls, Wisconsin; and Slidell, Louisiana ranked in that order.

NASA PRIME CONTRACT AWARDS PLACED IN LABOR SURPLUS AREAS FISCAL YEAR 1985

STATE	THOUSANDS	STATE	THOUSANDS
TOTAL ALABAMA	\$410,713 2,358	MISSISSIPPI MISSOURI	53,536 4,136
ALASKA	1,756	NEVADA	127
ARI ZONA	537	NEW JERSEY	20,099
CALIFORNIA	49,981	NEW YORK	1,757
DELAWARE	197	NORTH CAROLINA	26
DIST COLUMBIA	37,927	OHIO	85,788
FLORIDA	2,891	OREGON	1,445
GEORGI A	32	PENNSYLVANIA	35,222
ILLINOIS	9,271	RHODE ISLAND	84
INDIANA	11,071	SOUTH CAROLINA	244
KENTUCKY	500	TENNESSEE	6,679
LOUISIANA	15,129	TEXAS	621
MAINE	30	UTAH	69
MARYLAND	21,337	VIRGINIA	521
MASSACHUSETTS	816	WASHINGTON	24,359
MI CHI GAN	2,488	WEST VIRGINIA	269
MINNESOTA	26	WISCONSIN	19,384

^{*}Excludes smaller procurements, generally those of less than \$25,000; also excludes awards placed through other Government agencies, awards outside the U.S., and actions on the JPL contracts.

IX. Awards Placed Outside the United States

During Fiscal Year 1985, NASA placed \$43.6 million of awards that are being performed outside the United States.

As indicated in the following tabulation, \$43.581 million represented direct NASA awards; \$.025 million constituted awards placed with or through other Government agencies. The awards are being performed in 15 Countries.

PLACE OF PERFORMANCE	TOTAL (THOUSANDS)
TOTAL	<u>\$43,606</u> *
DIRECT NASA AWARDS ASCENSION ISLAND AUSTRALIA BELGUIM BERMUDA CANADA CHILE ENGLAND ISRAEL ITALY JAPAN PUERTO RICO SPAIN SWEDEN WEST GERMANY	\$43,581 1,581 7,847 30 724 14,007 3,519 2,148 53 224 10 181 12,932 60 265
PLACED WITH OR THROUGH OTHER GOVERNMENT AGENCIES GUAM	<u>\$25</u> 25

^{*}EXCLUDES SMALLER PROCUREMENTS, GENERALLY THOSE OF LESS THAN \$25,000

X. Procurement Activity by Installation

Most of NASA's purchases and contracts are made by the procurement offices of its field installations. During Fiscal Year 1985, these offices accounted for 94 percent of the total procurement dollars.

INSTALLATION	FY NET VALUE	1985 OF AWARDS
INSTALLATION	NET VALUE	PERCENT
	MILLIONS	OF TOTAL
TOTAL	\$8,298.0	100.0
MARSHALL SPC FLT CENTER	1,999.1	24.1
JOHNSON SPACE CENTER	1,719.1	20.7
GODDARD SPC FLT CENTER	1,076.8	13.0
KENNEDY SPACE CENTER	977.9	11.8
NASA RESIDENT OFFICE/JPL	724.6	8.7
LEWIS RESEARCH CENTER	675.7	8.2
HEADQUARTERS	476.0	5.7
AMES RESEARCH CENTER	340.4	4.1
LANGLEY RESEARCH CENTER	248.4	3.0
NAT SPACE TECH LAB	60.0	0.7

GLOSSARY

The data contained in this publication were compiled on the basis of the definitions given below:

- Sealed Bids Procurement actions resulting from acceptance of bids made by contractors in response to solicitations.
- Award See procurement action.

Coverage

- a. Summary data are provided in terms of obligations on all procurement actions (see item 10). The obligational data are obtained from the agency's fiscal records.
- b. Detailed data Information on procurements include all contracts, grants, agreements and all other procurements of \$25,000 and over. Wherever exclusions apply, a generalized footnote is provided, e.g., "excludes smaller procurements, generally those of less than \$25,000".
- 4. Direct Actions (Direct Awards) Procurement actions placed directly with business firms, educational and nonprofit institutions or organizations. The term excludes procurement actions placed with or through other Government agencies.
- 5. Intragovernmental Procurement actions placed with or through other Government agencies; except orders placed under Federal Supply Schedule contracts and awards to minority enterprises through the Small Business Administration under Section 8(a) of the Small Business Act.
- 6. Modification Any written alteration in the specifications, delivery point, rate of delivery, contract period, price, quantity, or other contract provision of an existing contract, whether accomplished by unilateral action in accordance with a contract provision or by mutual action of the parties to the contract. It includes (a) bilateral actions, such as supplemental agreements, and (b) unilateral actions, such as change orders, notices of termination, and notices of the exercise of an option.
- 7. <u>Competitive</u> Procurements where offers were received from at least two responsible offerors capable of satisfying the Government's requirements wholly or partially, and the award

- or awards were made on the basis of price, design or technical competition.
- 8. Other Than Competitive Procurements where offer was received from only one responsible offeror capable of satisfying the Government's requirements wholly or partially. (Includes contracts resulting from unsolicited proposals.)
- 9. Net Value Net amount of obligations resulting from debit and credit procurement actions.
- 10. <u>Procurement Action (Award)</u> Any contractual action to obtain supplies, services or construction which obligates or deobligates funds including:
 - a. Letter contracts or other preliminary notices of negotiated awards.
 - b. Definitive contracts, including purchase orders.
 - c. Orders under GSA Federal Supply Schedule contracts, basic order agreements, and against indefinite delivery type contracts.
 - d. Intragovernmental.
 - e. Grants.
 - f. Cooperative & Space Agreements.
 - g. Supplemental agreements, change orders, administrative changes and terminations to existing procurements.
- 11. Small Business For purposes of Government procurement, is a profit making concern, including its affiliates, which is independently owned and operated, is not dominant in its field and further qualifies under the size standards criteria of the Small Business Administration (SBA). These criteria are published under Title 13 of the Code of Federal Regulations, Section 121.3-8, and in the Federal Acquisition Regulation, Part 19, Subpart 19.1. For service industries, the size standard generally is based on average annual receipts over a three year period, depending on the service to be procured. Generally, in the case of agricultural or manufactured products, the size standards are determined on the basis of number of employees. The applicable size standard is prescribed in each NASA procurement solicitation.

APPENDIXES

DISTRIBUTION OF DIRECT NASA PROCUREMENTS

FISCAL YEARS 1961 - 1970

TYPE	FY 1961	FY 1962	FY 1963	FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970
			Nec	Value of	Awards (M	(Millions)				
	\$755.5	\$1,550.6	\$3,230.5	\$4,593.9	\$5,187.4	\$5,031.6	\$4,650.9	\$4,132.7	\$3,652.0	\$3,405.6
Business Firms	423.3	1,030.1	2,261.7	3,521.1	4,141.4	4,087.7	3,864.1	3,446.7	3,022.3	2,759.2
Educational			86.9	112.9	139.5	150.0	132.9	131.5	131.3	134.3
Nonprofit	C.#2	7.00	15.3	29.1	25.3	27.7	39.6	33.6	32.3	33.0
	86.0	148.5	230.2	226.2	247.2	230.3	222.2	207.2	156.3	179.8
Government	221.7	321.8	628.5	692.6	622.8	512.5	366.9	287.0	279.0	265.8
Outside U.S.	*	(*)	7.9	12.0	11.2	23.4	25.2	26.7	30.8	33.5
				Percent	ent of Total	al	***			
	100	100	100	100	100	100	100	100	100	100
Business Firms	95	99	70	7.7	13	81	83	83	83	81
Educational	r	r	т	7	m	m	м	m	4	4
Nonprofit	າ	າ	(**)	ч	н		п	ı	7	1
	12	10	7	Ŋ	ഗ	ហ	Ŋ	S	4	S
Government	29	21	50	15	12	10	80	7	7	80
Outside U.S.	(*)	(*)	(**)	(**)	(**)	(**)	(**)	н	н	г

*Included in Government. **Less than 0.5 percent.

APPENDIX I

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DISTRIBUTION OF DIRECT NASA PROCUREMENTS (Cont'd)

FISCAL YEARS 1971 - 1979

TYPE	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975	FY 1976	FY 197T	FY 1977	FY 1978	FY 1979
				Net Value	lue of Awards	rds (Millions)	ons)			
Total	\$2,858.2	\$2,737.8	\$2,673.4	\$2,713.6	\$2,866.4	\$3,204.6	\$829.8	\$3,532.3	\$3,659.6	\$4,211.8
Business Firms	2,279.5	2,143.3	2,063.8	2,118.6	2,255.0	2,536.1	663.2	2,838.1	2,953.8	3,416.4
Educational	133.9	118.8	111.7	97.8	111.4	123.0	27.7	125.5	137.2	147.2
Nonprofit	29.3	28.0	26.4	39.3	33.0	32.0	7.6	32.0	42.8	50.8
JPL	173.3	210.8	202.3	215.2	234.5	263.7	63.6	289.0	283.8	338.6
Government	212.5	207.8	235.2	208.6	198.3	222.4	63.9	223.2	216.0	221.4
Outside U.S.	29.7	29.1	34.0	34.1	34.2	27.4	3.8	24.5	26.0	37.4
					Percent of	of Total				
Total	100	100	100	100	100	100	100	100	100	100
Business Firms	80	78	77	78	19	19	80	80	81	81
Educational	ស	4	4	4	4	4	ю	4	4	4
Nonprofit		н	a	H		н	1	7	٦	-
JPL	9	80	ω	80	80	80	8	80	80	&
Government	7	8	6	ω	7	7	80	9	S	Ŋ
Outside U.S.		н	н	п	н	1	*	н	٦	п

*Less than 0.5 percent.

APPENDIX I

DISTRIBUTION OF DIRECT NASA PROCUREMENTS (Cont'd)

FISCAL YEARS 1980 - 1985

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						···									
	_					···						<u>-</u>			
ds (Millions)	\$8,298.0	6,652.9	256.9	103.1	724.6	525.1	35.4	Total	100	80	<u> </u>		6	9	
ue of Awar	\$7,354.1	5,967.4	222.6	98.6	533.1	494.3	38.1	Percent of	100	81	m	1	7	7	
Net Va	\$6,796.8	5,586.0	211.3	102.5	454.9	394.2	47.9		100	82	ĸ	-	7	9	H
	\$5,883.7	4,805.6	187.0	108.8	426.3	308.1	47.9		100	82	က	2	7	ស	-
	\$5,408.3	4,272.8	192.5	155.1	410.8	321.9	55.2		100	79	က	က	80	9	
	\$4,842.6	3,868.3	177.0	82.2	397.2	271.8	46.1		100	80	က	2	80	9	
	Total	Business Firms	Educational	Nonprofit	JPL	Government	Outside U.S.		Total	Business Firms	Educational	Nonprofit	JPL	Government	Outside U.S.
	Value	\$4,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354	st,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 ness Firms 3,868.3 4,272.8 4,805.6 5,586.0 5,967	st,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 ness Firms 3,868.3 4,272.8 4,805.6 5,586.0 5,967 ational 177.0 192.5 187.0 211.3 222	Net Value of S5,408.3 \$4,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 ational 177.0 192.5 187.0 211.3 222 rofit 82.2 155.1 108.8 102.5 98	84,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 ness Firms 3,868.3 4,272.8 4,805.6 5,586.0 5,967 ational 177.0 192.5 187.0 211.3 222 rofit 82.2 155.1 108.8 102.5 98 397.2 410.8 426.3 454.9 533	Net Value of S4,842.6 \$4,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 ational 177.0 192.5 187.0 211.3 222 rofit 82.2 155.1 108.8 102.5 98 rnment 271.8 321.9 308.1 394.2 494	84,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 ness Firms 3,868.3 4,272.8 4,805.6 5,586.0 5,967 ational 177.0 192.5 187.0 211.3 222 rofit 82.2 155.1 108.8 102.5 98 rnment 271.8 321.9 426.3 454.9 533 ide U.S. 46.1 55.2 47.9 38	Net Va ue of Total Susiness Firms \$4,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 Business Firms 3,868.3 4,272.8 4,805.6 5,586.0 5,967 Educational 177.0 192.5 187.0 211.3 222 Nonprofit 82.2 155.1 108.8 102.5 98 JPL 397.2 410.8 426.3 454.9 533 Government 271.8 321.9 308.1 394.2 494 Outside U.S. 46.1 55.2 47.9 47.9 8ercen	st,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 ational 177.0 192.5 187.0 211.3 222 rofit 82.2 155.1 108.8 102.5 98 rnment 271.8 321.9 308.1 394.2 494 ide U.S. 46.1 55.2 47.9 47.9 88	Total \$4,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 Business Firms 3,868.3 4,272.8 4,805.6 5,586.0 5,967 Educational 177.0 192.5 187.0 211.3 222 Nonprofit 82.2 155.1 108.8 102.5 98 JPL 397.2 410.8 426.3 454.9 533 Government 271.8 321.9 308.1 394.2 494 Outside U.S. 46.1 55.2 47.9 47.9 Percentent Total 100 100 100 100 Business Firms 80 79 82 81	Total \$4,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 Business Firms 3,868.3 4,272.8 4,805.6 5,586.0 5,967 Educational 177.0 192.5 187.0 211.3 222 Nonprofit 82.2 155.1 108.8 102.5 98 JPL 397.2 410.8 426.3 454.9 533 Government 271.8 321.9 308.1 394.2 494 Outside U.S. 46.1 55.2 47.9 47.9 38 Business Firms 80 79 82 81 Educational 3 3 3 3 3	Total S4,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 Business Firms 3,868.3 4,272.8 4,805.6 5,586.0 5,967 Educational 177.0 192.5 187.0 211.3 222 Nonprofit 82.2 155.1 108.8 102.5 98 JPL 397.2 410.8 426.3 454.9 533 Government 271.8 321.9 308.1 394.2 494 Outside U.S. 46.1 55.2 47.9 47.9 Percent Total 100 100 100 100 Business Firms 80 79 82 81 Educational 3 3 3 3 Nonprofit 2 3 2 1	Total Net Value of Educational Total \$4,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 Business Firms 3,868.3 4,272.8 4,805.6 5,586.0 5,967 Educational 177.0 192.5 187.0 211.3 222 Nonprofit 82.2 155.1 108.8 102.5 98 JPL 397.2 410.8 426.3 454.9 533 Government 271.8 321.9 308.1 394.2 494 Outside U.S. 46.1 55.2 47.9 47.9 88 Business Firms 80 79 82 82 81 Fducational 3 3 3 3 3 3 JPL 8 8 7 7 7 7	Total Net Value of Educational Total \$4,842.6 \$5,408.3 \$5,883.7 \$6,796.8 \$7,354 Business Firms 3,868.3 4,272.8 4,805.6 5,586.0 5,967 Educational 177.0 192.5 187.0 211.3 222 Nonprofit 82.2 155.1 108.8 102.5 98 Government 271.8 321.9 308.1 394.2 494 Outside U.S. 46.1 55.2 47.9 47.9 88 Business Firms 80 79 82 81 Educational 3 3 3 3 Nonprofit 2 3 7 7 Government 6 6 5 6 7

APPENDIX I

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS

FISCAL YEARS 1961 - 1970

1969 FY 1970		\$3,022.3 496.5 2,525.8 \$2,139.5	1,632.7 1,86.7 1,446.0 1,351.2	1,389.6 309.8 1,079.8 1,88.3		$\begin{array}{c c} 100 & 100 \\ \hline 16 & 22 \\ 84 & 78 \end{array}$	54 6 10 48	46 10 12 36 29	
FY 1968 FY 1		\$3,446.7 \$3,0 483.7 2,963.0 2,5	$\begin{array}{c c} 2,185.1 & 1,6 \\ 271.9 & 1,4 \\ 1,913.2 & 1,4 \end{array}$	1,261.6 211.8 1,049.8		100 14 86	63 55	37 31	
FY 1967 F	(\$	\$3,864.1 \$ 694.7 3,169.4	2,698.4 325.2 2,373.2	1,165.7 369.5 796.2		100 18 82	70 8 62	20 <u>10</u>	
FY 1966	ds (Millions	\$4,087.7 536.4 3,551.3	2,692.5 304.2 2,388.3	1,395.2 232.2 1,163.0	Total	100 13 87	59	34	
FY 1965	Value of Awards	\$4,141.4 629.2 3,512.2	2,630.1 334.5 2,295.6	1,511.3 294.7 1,216.6	Percent of Total	100 15 85	63 55	30	and over.
FY 1964	Net Va	\$3,521.1 685.4 2,835.7	2,119.5 375.9 1,743.6	1,401.6 309.5 1,092.1		100 20 80	60 11 49	31 9	of \$10,000
FY 1963		\$2,261.7 758.6 1,503.1	1,302.0 427.1 874.9	959.7 331.5 628.2		100 34 66	58 19 39	42 15 27	
FY 1962		\$1,030.1	565.8 167.1 398.7	464.3 155.5 308.8		100 31 69	55 16 39	45 15 30	estricted to
FY 1961		\$423.3	276.8	146.5		100	* *46	* * *	racts are red.
Type of Action		Total Business New Awards* Modifications	Competitive New Awards* Modifications	Noncompetitive New Awards* Modifications		Total Business New Awards* Modifications	Competitive New Awards* Modifications	Noncompetitive New Awards* Modifications	*Data on new contracts are restricted to contracts

APPENDIX II

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS (Cont'd)

FISCAL YEARS 1971 - 1979

L	<u> </u>	OZ E	<u> </u>	ON E	<u>.</u>	원 ^{조 또} 5 0 -	OZ E	OZ E	A	Ĺ
Type of Action		Total Business New Awards* Modifications	Competitive New Awards* Modifications	Noncompetitive New Awards* Modifications		Total Business New Awards* Modifications	Competitive New Awards* Modifications	Noncompetitive New Awards* Modifications	*Data on new contracts are	
FY 1971		\$2,279.5 563.0 1,716.5	1,331.8 306.6 1,025.2	947.7 256.4 691.3		100 24 76	58 13 45	42 11 31		
FY 1972		\$2,143.3 462.5 1,680.8	1,311.8 257.0 1,054.8	831.5 205.5 626.0		100 22 78	61 12 49	39 10 29	restricted to	
FY 1973 •		\$2,063.8 489.5 1,574.3	1,275.6 308.1 967.5	788.2 181.4 606.8		100 24 76	62 15 47	38 9	contracts	
FY 1974	Net Va	\$2,118.6 552.4 1,566.2	1,394.9 279.5 1,115.4	723.7 272.9 450.8		100 26 74	66 13 53	34 13 21	of \$10,000 a	
FY 1975	Value of Award	\$2,255.0 452.0 1,803.0	1,554.6 223.9 1,330.7	700.4 228.1 472.3	Percent of	100 20 80	69 10 59	$\frac{31}{10}$	and over.	
FY 1976	Awards (Millions)	\$2,536.1 486.3 2,049.8	1,879.5 291.3 1,588.2	656.6 195.0 461.6	Total	$\frac{100}{19}$ 81	74	26 8 18		
FY 197T	- G	\$663.2 76.4 586.8	490.9 46.8 444.1	172.3 29.6 142.7		100 11 89	74	26 4 22		
FY 1977		\$2,838.1 552.5 2,285.6	2,060.4 301.7 1,758.7	777.7 250.8 526.9		100 20 80	73 11 62	27		
FY 1978		\$2,953.8 633.1 2,320.7	2,111.5 362.1 1,749.4	- 842.3 271.0 571.3		100 22 78	13	28 9 19		
FY 1979		\$3,416.4 516.6 2,899.8	2,541.1 304.0 2,237.1	875.3 212.6 662.7		100 15 85	74 9	26		

APPENDIX II

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS (Cont'd)

FISCAL YEARS 1980 - 1985**

FY 1985	ls (Millions)	\$6,525.9 775.9 5,750.0	\$5,030.2 533.5 4,496.7	\$1,495.7 242.4 1,253.3	Total	100 12 88	77 8 69	23 4 19	
FY 1984	ue of Awards	\$5,859.3 716.6 5,142.7	4,286.6 426.0 3,860.6	1,572.7 290.6 1,282.1	Percent of	100 12 88	73	27 22	and over.
FY 1983	Net Va	\$5,501.2 761.0 4,740.2	3,845.3 446.2 3,399.1	1,655.9 314.8 1,341.1		100 14 86	70 8	30 6 7 4 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6	of \$25,000 a
FY 1982		\$4,724.5 717.6 4,006.9	3,436.5 351.9 3,084.6	1,288.0 365.7 922.3		100 15 85	72	28 20	contracts
FY 1981		\$4,208.2 479.3 3,728.9	3,127.7 2557.8 2,869.9	1,080.5 221.5 859.0		100 11 89	74 6 68	26 5 21	restricted to
FY 1980		\$3,820.4 634.3 3,186.1	2,858.1 382.5 2,475.6	962.3 251.8 710.5		100 17 83	75 10 65	25	are
Type of Action		Total Business** New Awards* Modifications	Competitive New Awards* Modifications	Other Than Competitive New Awards* Modifications		Total Business New Awards* Modifications	Competitive New Awards* Modifications	Other Than Competitive New Awards* Modifications	*Data on new contracts **Excludes 8(a) awards

APPENDIX II

SMALL BUSINESS PARTICIPATION IN NASA PROCUREMENTS

FISCAL YEARS 1961 - 1985 (Millions of Dollars)

	FY 1961	FY 1962	FY 1963	FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970
Total Business	\$ 423.3*	423.3* \$1,030.1*	\$2,261.7	\$3,521.1	\$4,141.4	\$4,087.7	\$3,864.1	\$3,446.1	\$3,022.3	\$2,759.2
Small Business	63.5	123.6	191.3	240.3	286.3	255.9	216.9	189.6	162.8	161.2
Sm. Bus. % of Total	15.0%	12.0%	8.5%	6.8%	6.9%	6.3%	5.6%	5.5%	5.4%	5.8%
	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975	FY 1976	FY 197T	FY 1977	FY 1978	FY 1979
Total Business	\$2,279.5	\$2,143.3	\$2,063.8	\$2,118.6	\$2,255.0	\$2,536.1	\$ 663.2	\$2,838.1	\$2,953.8	\$3,416.4
Small Business	178.1	160.9	155.3	181.2	216.0	218.3	68.4	255.0	281.5	325.4
Sm. Bus. % of Total	7.8%	7.5%	7.5%	8.6%	9.6%	8.6%	10.3%	90.6	9.5%	9.5%
	FY 1980	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985				
Total Business	\$3,868.3	\$4,272.8	\$4,805.6	\$5,586.0	\$5,967.4	\$6,652.9				
Small Business	384.6	409.4	430.1	482.3	556.2	644.7				
Sm. Bus. % of Total	96.6	9.6%	8.9%	8.6%	9.3%	9.7%				-
*Excludes procurements		placed under General Services	11 Services		Administration contracts	tracts.				

APPENDIX III